

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Stephen B. Ackerman (Reg. 37,761) on 12/11/2008

3. The application has been amended as follows:

In claim 1, please replace the subject matter in the claim with the following:

1. A method to zoom a region of interest from a digital source image, wherein a resolution of the region of interest is either decimated or enlarged to fit into a destination image, comprising:

providing a digital camera to implement the following steps:

(1) define size and location of said region of interest as part of said source image;

(2) calculate scale of conversion in x- and y-direction;

(3) calculate number of rows of pixels of said destination image according to scale of conversion desired in y-direction;

(4) calculate number of pixels contained in a row of pixels of said destination image according to scale of conversion desired in x-direction;

(5) calculate color values of each pixel along the rows of pixels of the destination image by interpolation from nearest row of pixels of said

source image wherein the color values of the pixels of the destination image being located between the left side edge of the source image and the first pixel of the nearest row of pixels of the region of interest of the source image and the color values of the pixels of the destination image being located between the right side edge of the source image and the last pixel of the nearest row of the source image are achieved by replicating the color values of said first, or correspondingly said last, pixel of the nearest row of the source image; and

(6) display zoomed region of interest in said destination image

*In claim 14, please replace the subject matter in the claim with the following:*

14. A method to zoom a region of interest from a digital source image, wherein a resolution of the region of interest is either decimated or enlarged to fit into a destination image,

providing a digital camera to implement the following steps:

- (1) define size and location of said region of interest as part of said source image;
- (2) calculate scale of conversion in x-and y-direction;
- (3) calculate number of columns of pixels of said destination image according to scale of conversion desired in x-direction;
- (4) calculate number of pixels contained in a column of pixels of said destination image according to scale of conversion desired in y-direction;

(5) calculate color values of columns of pixels of said destination image by interpolation from nearest column of pixels of source image wherein the color values of the pixels of the destination image being located between the upper side edge of the source image and the first pixel of the nearest column of pixels of the source image and the color values of the pixels of the destination image being located between the bottom side edge of the source image and the last pixel of the nearest column of the source image are achieved by replicating the color values of said first, or correspondingly said last, pixel of the nearest column of the source image.; and

(6) display zoomed region of interest in said destination image.

In claim 27, please replace the subject matter in the claim with the following:

27. A method to zoom a region of interest from a digital source image, wherein a resolution of the region of interest is either decimated or enlarged to fit into a destination image, comprising:

providing a digital camera to implement the following steps:

(1) define size and location of said region of interest as part of said source image;

(2) calculate the scale of conversion of the resolution in x-and y-direction;

(3) calculate number of rows of pixels of said destination image according to scale of conversion desired in y-direction;

(4) calculate number of pixels contained in a row of pixels of said destination image according to scale of conversion desired in x-direction;

(5) calculate x, y virtual starting point of said destination pixel for each frame;

(6) calculate virtual location of first destination pixel for new row in x-direction and interpolate new color values of color space of said first destination pixel from nearest source pixels located at nearest row of source pixels in y-direction wherein the color values of the pixels of the destination image being located between the left side edge of the source image and the first pixel of the nearest row of pixels of the source image and the color values of the pixels of the destination image being located between the right side edge of the source image and the last pixel of the nearest row of the source image are achieved by replicating the color values of said first, or correspondingly said last, pixel of the nearest row of the source image;

(7) calculate virtual position of next destination pixel in x-direction according to scale factor and interpolate new color values of color space used of said next pixel from nearest source pixels located at nearest row of source pixels in y-direction wherein the color values of the pixels of the destination image being located between the left side edge of the source image and the first pixel of the nearest row of pixels of the source image and the color values of the pixels of the destination image being located between the right side edge of the source image and the last pixel of the

nearest row of the source image are achieved by replicating the color values of said first, or correspondingly said last, pixel of the nearest row of the source image;

(8) go to next step (9) if last destination pixel in x-direction has been reached otherwise go to step (6);

(9) go to step (11) if last row of destination pixels has been reached otherwise go to next step (10);

(10) calculate virtual location of next row in y-direction according to scale factor in y-direction and go to step (5); and

(11) display zoomed region of interest in said destination image.

In claim 40, please replace the subject matter in the claim with the following:

40. A method to zoom a region of interest from a digital source image, wherein a resolution of the region of interest is either decimated or enlarged to fit into a destination image, comprising:

providing a digital camera to implement the following steps:

(1) define size and location of said region of interest as part of said source image;

(2) calculate the scale of decimation in x-and y-direction;

(3) calculate number of columns of pixels of said destination image according to scale of conversion desired in x-direction;

(4) calculate number of pixels contained in a column of pixels of said destination image according to scale of conversion desired in y-direction;

- (5) calculate x, y virtual starting point of a destination pixel for each frame;
- (6) calculate virtual location of first destination pixel for new column in y-direction and interpolate new color values of color space of said first destination pixel from nearest source pixels located at nearest column of source pixels in x-direction;
- (7) calculate virtual position of next destination pixel in y-direction according to scale factor and interpolate new color values of color space used of said next pixel from nearest source pixels located at nearest column of source pixels in x-direction;
- (8) go to next step (9) if last destination pixel in y-direction has been reached otherwise go to step (6);
- (9) go to step (11) if last column of destination pixels has been reached otherwise go to next step (10);
- (10) calculate virtual location of next column in x-direction according to scale factor in x-direction and go to step (5); and
- (11) display zoomed region of interest in said destination image

#### **REASONS FOR ALLOWANCE**

- 4. *Claims 1-2, 4-15, 17-28 and 30-40 are allowed over the prior art of record.*
- 5. The following is an examiner's statement of reasons for allowance: In addition to the teachings of claims 1, 14, 27 and 40, as a whole, closest art of record failed to teach or suggest among other thing,

*“calculate color values of each pixel along the rows of pixels of the destination image by interpolation from nearest row of pixels of said source image wherein the color values of the pixels of the destination image being located between the left side edge of the source image and the first pixel of the nearest row of pixels of the region of interest of the source image and the color values of the pixels of the destination image being located between the right side edge of the source image and the last pixel of the nearest row of the source image are achieved by replicating the color values of said first, or correspondingly said last, pixel of the nearest row of the source image.”*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### **Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKLILU k. WOLDEMARIAM whose telephone number is (571)270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samir Ahmed  
Examiner  
Art Unit 2624

/A. k. W./  
Examiner, Art Unit 2624  
12/12/2008

/Brian Q Le/  
Primary Examiner, Art Unit 2624